McCoy, Erin

From: McCoy, Erin
Sent: Thursday, October 15, 2015 1:26 PM
To: Hylton Jackson (Hylton.Jackson@dnr.iowa.gov)
Cc: Marquess, Scott; Richards, Robert
Subject: FW: Vogel's
Attachments: removed.txt; Well Monitoring Table.docx

Importance: High

Hylton, I need to fill you in on a little back story here. I noticed in the QAPP revisions that some of the well designations had changed from the 2005 Groundwater Monitoring Plan. These designations are very important since concentrations of COCs above ARARs in perimeter and guard wells require certain actions per the 2003 Consent Order. So I pointed this out to Linda when she called me. Keith looked into it and called me to let me know that he would send us an updated list.

I have been comparing the updated list to the 2005 Groundwater Monitoring Plan, the 2003 Consent Order, and the 2002 Groundwater Monitoring Plan. There seems to be some discrepancies in how the well designations changed or were initially assigned (as in the case of new wells) and the definitions of the designations. Based on the 2002 Groundwater Monitoring Plan and 2003 Consent Order, the definitions were:

- Perimeter – used to detect **off-site** contamination migration (Page 2 of the 2002 Groundwater Monitoring Plan)
- Guard – provide an indication of contaminant migration that may cause an exceedance of statewide standards at the **Site's southern boundary** – as monitored in the southern Site perimeter monitoring wells – well in advance of such an exceedance actually occurring (Page 8, paragraph 1 of the 2003 Consent Order).
- Interior – track on-site conditions (i.e., overall changes in magnitude and extent of contamination) (Page 2 of the 2002 Groundwater Monitoring Plan)

As you can see, the designation was dependent on where the well was installed in relation to the site boundaries. However, it appears that as the plume grew, the designation of wells changed based on the plume boundary, not the site boundary as the 2002 Groundwater Monitoring Plan and 2003 Consent Order outline. In the 2005 Groundwater Monitoring Plan, which is the most recent plan the definitions in this plan on page 3 are:

- Perimeter – used to detect contamination migration **at the perimeter of the plume**.
- Guard – provide an indication of contaminant migration that may cause a violation statewide standards **at the plume boundary**.
- Interior – track on-site migrations (i.e., Overall changes in the magnitude and extent of contamination).

I bolded the main changes in the definition. As a result of these changes, when GMW-7 was replaced with GMW-7R, the replacement well was designated an interior well instead of a perimeter well, even though well GMW-7R was installed at the southern property boundary and GMW-7 was an perimeter well as outlined in the Consent Order. Also, other new wells installed downgradient and off site became interior (GMW-21) and perimeter (GMW-30) wells. This does not correspond with the definitions given in the 2002 Groundwater Monitoring Plan or the 2003 Consent Order.

This is concerning since the 2003 Consent Order specifically lays out what is to occur if exceedances of the ARARs are detected in perimeter and guard wells. I cannot find any record where IDNR or EPA approved the change in the definition of the well designation, although we did approve the reports where the changes in well designations were made. Since this traces all the way back to the 2005 Groundwater Monitoring Plan, I believe the only way to fix this is to request an updated Groundwater Monitoring Plan. Or Vogel could clear this up in the QAPP revisions that they are

currently working on. This will also be a chance for IDNR and EPA to verify the well designation definitions and verify each well designation with respect to property boundaries, as the 2003 Consent Order specifies.

What are your thoughts on this matter? If they are going to fix this in the QAPP revisions, they should probably be notified ASAP. Please feel free to call me to discuss and let me know how you decide to handle this. Thanks!

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From: Keith Delange [mailto:KDelange@geotekeng.com]
Sent: Thursday, October 15, 2015 10:13 AM
To: McCoy, Erin <McCoy.Erin@epa.gov>; Jackson, Hylton [DNR] (Hylton.Jackson@dnr.iowa.gov) <Hylton.Jackson@dnr.iowa.gov>
Cc: Linda Watts <LWatts@geotekeng.com>; Scott.Heemstra@vogelpaint.com
Subject: Vogel's

Erin,

Table attached is the one from page 3 in QAPP – Linda changed all designations back to what they were in the 2005 Groundwater Monitoring Plan. The following wells were not included in the 2005 plan: GMW4, GMW6, GMW10R, GMW14, GMW22, GMW33 thru GMW37. We have added designations for those wells as indicated on the table.

If you have questions or want to discuss, let me know.

Keith

From: Linda Watts
Sent: Thursday, October 15, 2015 9:52 AM
To: Keith Delange
Subject:

Table attached

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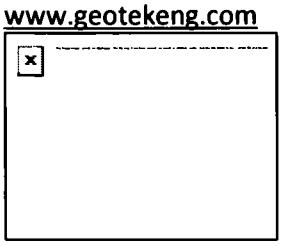

Monitoring Location ID	Well Designation	Semi-Annual	Annually	Parameters
MW-1	On-site Perimeter		√	BTEX
MW-4R	2000 Excavation Area Free Product/Source/Interior	√		BTEX (Metals annually)
MW-5	On-site – South Fence Line Perimeter		√	BTEX
GMW-3	North of Source Areas Perimeter		√	BTEX
GMW-4	North of Source Areas Perimeter		√	BTEX (Metals annually)
GMW-6	On-site Perimeter		√	BTEX
GMW-7R	On-site – South Fence Line Interior	√		BTEX (Metals annually)
GMW-8	On-site Perimeter		√	BTEX
GMW-9R	2000 Excavation Area Interior	√		BTEX (Metals Annually)
GMW-10R	2000 Excavation Area - Interior	√		BTEX
GMW-13	Metals Soils Disposal Area Interior		√	BTEX (Metals annually)
GMW-14	On-site – North of Excavation Area – Interior		√	BTEX
GMW15	On-site – South of Source Areas Interior	√		BTEX (Metals annually)
GMW16	On-site – South of Source Areas Interior	√		BTEX
GMW17	On-site – South of Source Areas Interior		√	BTEX
GMW18R	On-site – South of Source Areas Interior		√	BTEX
GMW-19	On-site – South Fence Line Interior	√		BTEX
GMW-20	On-site – South Fence Line Interior	√		BTEX
GMW-21	Off-site – South of Source Areas Interior	√		BTEX
GMW-22	Off-site – South of Source Areas Perimeter	√		BTEX
GMW-25	Off-site – South of Source Areas Guard	√		BTEX
GMW-30	Off-site – South of Source Areas Perimeter	√		BTEX
GMW-33	On-site – South Fence Line - Interior	√		BTEX
GMW-34	On-site – South of Source Areas Perimeter	√		BTEX
GMW-35	Off-site – Guard	√		BTEX
GMW-36	Off-site – Guard	√		BTEX
GMW-37	Off-site – Guard	√		BTEX
TC-6S	On-site – South of Source Areas Interior		√	BTEX
TC-6D	On-site – South of Source Areas Interior	√	√	BTEX (Metals annually)

Monitoring Location ID	Well Designation	Semi-Annual	Annually	Parameters
TC-7	North of Source Area Impacts to Creek/Perimeter		√	BTEX (Metals annually)
TC-22S	On-site Perimeter		√	BTEX
TC-22D	On-site Perimeter		√	BTEX
TC-23	On-site – South Fence Line Perimeter		√	BTEX